The Journal of the Royal Aeronautical Society

WITH WHICH IS INCORPORATED THE INSTITUTION OF AERONAUTICAL ENGINEERS

INDEX TO VOLUME LXIII January - December 1959

ACOUSTICS

Some Aspects of Engine Noise, P. Lloyd, p. 541 (Sept.).

AERODYNAMICS

See also Boundary Layer, Ducts, Hypersonic Flow, Mathematics, Matrices (Metal), Testing.

Annular Flow—A Note on the Turbulent Velocity Profile (T.N.), (Henry Barrow, Nov. 1958); Comment by William Squire, p. 119 (Feb.).

Coefficient of Contraction in the Flow Through Perforated Plates, The (T.N.), P. G. Morgan, p. 723 (Dec.).

Eddy Diffusivity in Annular Flow, The (T.N.), Henry Barrow, p. 180 (March).

Estimate of the Suction Peak on Infinite Sheared Wings, An (T.N.), J. Weber, p. 476 (Aug.).

High Speed Flow Through Wire Gauzes (T.N.), P. G. Morgan, p. 474 (Aug.).

Note on the Causes of Thin Aerofoil Stall, A (T.N.), T. W. F. Moore, p. 724 (Dec.).

On the Aerodynamic Design of Slender Wings, E. C. Maskell and J. Weber, p. 709 (Dec.).

AEROELASTICITY

Aeroelasticity—Retrospect and Prospect—The Second Lanchester Memorial Lecture, A. R. Collar, p. 1 (Jan.).

Present Status of Aircraft Stability Problems in the Aeroelastic Domain, The, A. S. Taylor, p. 227 (April).

Theoretical Treatment of the Flutter of a Wing with a Localised Mass, A, D. R. Gaukroger, p. 95 (Feb.).

AIR TRAFFIC CONTROL

See also Take-Off and Landing.

Air Traffic Control Over The North Atlantic, E. W. Pike, p. 206 (April).

Air Traffic Control and its Influence on the Navigation Problem, D. O. Fraser, p. 175 (March).

AIR TRANSPORT

See also Oxygen Systems Take-Off and Landing.

Freighters—A General Survey, E. D. Keen, p. 135 (March).

AIRCRAFT CARRIERS

See Naval Aircraft.

AIRWORTHINESS

See Take-Off and Landing.

AGRICULTURAL AVIATION

Aircraft in Agriculture; An Assessment of Their Impact on New Zealand Farming, R. H. Scott, p. 531 (Sept.).

Third Agricultural Aviation Research Conference, The (T.N.), P. H. Southwell, p. 183 (March).

ALLISON, I. M.

The Prediction of Three-Dimensional Stress Concentration Factors (T.N.), p. 549 (Sept.).

ALUMINIUM ALLOYS

See Materials.

ANDREWS, E. G. D. and A. W. T. MOTTRAM

A Note on Liquid and Solid Propellants for Rockets (T.N.), p. 265 (April).

ANNUAL REPORT OF THE COUNCIL

Ninety-Fourth Report, p. 239 (April).

ASTRONAUTICS

See also Navigation.

Aerodynamic Problems of Manned Space Vehicles, T. R. F. Nonweiler, p. 521 (Sept.).

Earth Satellites, W. H. Stephens, p. 394 (July).

AUSTRALIA

See Industry.

AUSTRALIAN DIVISION

Annual Report, p. 733 (Dec.).

AUTOMATIC CONTROL

See also Guided Missiles, Radar, Take-Off and Landing.

Drone Aircraft, H. G. Conway, p. 163 (March).

BAGLEY, J. A.

An Estimate of the Forces on Annular Fairings (T.N.), p. 315 (May).

BANKS, F.R.

The Present and the Future, p. 16 (Jan.).

BARROW, HENRY

The Eddy Diffusivity in Annular Flow (T.N.), p. 180 (March).

BEADLE, BERYL E.

Summary of the Discussion—Hypersonic Flow (All-Day Discussion), p. 528 (Sept.).

BENSON, R. S. and W. A. WOODS

Measurement of Travelling Shock Waves and Transient Velocities with a Farnboro Indicator (T.N.), p. 317 (May).

BLERIOT, LOUIS—THE TWELFTH LECTURE

The Griffon Aircraft and the Future of the Turbo-Ram-Jet Combination in the Propulsion of Supersonic Aeroplanes, General Noël Daum, p. 327 (June).

BLOODHOUND

See Guided Missiles.

BOARDMAN, F. D.

Basic Principles of Radar with Particular Reference to Aircraft and Missile Applications, p. 589 (Oct.).

BORE, C. L.

Some Practical Aspects of Kinetic Heating Calculations (Structural Effects of Kinetic Heating), p. 637 (Nov.).

BOUNDARY LAYER

See also Hypersonic Flow.

Critical Height of Distributed Roughness to Cause Boundary Layer Transition, The (T.N.), R. L. Dommett, p. 722 (Dec.).

BRODIE, JOHN L. P.

Frank Bernard Halford—First Halford Lecture, p. 194 (April).

BRUCE, JOAN and MAUREEN E. MICHAEL

Summary of the Discussion—Structural Effects of Kinetic Heating (All-Day Discussion), p. 656 (Nov.).

BURT, E. G. C.

Theoretical Principles of Guided Missile Systems, p. 455 (Aug.).

CALDWELL, J. B.

Elastic Instability of Stiffened Sheet under Compression Reacted by Shear (T.N.), p. 366 (June).

CALVERT, E. S.

Safety and Regularity in Landing (Problems of Take-Off and Landing), p. 690 (Dec.).

CHEVERTON, B. T.

Icing Flight Development, p. 659 (Nov.).

CHILVER, A. H.

Tensile Strut-Testing Machines (T.N.), p. 57 (Jan.).

COLES, A.

Comment on Damage to Axial Compressors (J. Dunham Oct.), p. 731 (Dec.).

COLLAR, A. R.

Aeroelasticity—Retrospect and Prospect—The Second Lanchester Memorial Lecture, p. 1 (Jan.).

Iterative Solutions of the Equations for Plane Oblique Shock Waves (T.N.), p. 669 (Nov.).

On the Evaluation of Certain Finite Sums of Progressive Products (T.N.), p. 118 (Feb.).

COLLEY, R. H.
Thrust Reversal for Jet Aircraft, p. 563 (Oct.).

COMMONWEALTH AERONAUTICAL ADVISORY RESEARCH COUNCIL
See Take-Off and Landing.

COMPRESSORS
Damage to Axial Compressors, J. Dunham, p. 576 (Oct.). Comment by A. Coles and Reply, p. 731 (Dec.).
Wakes in Axial Compressors (T.N.), H. Pearson and A. B. McKenzie, p. 415 (July). Comment by W. F. Wiles, p. 730 (Dec.).

COMPUTATION
See Mathematics.

COMPUTERS
The Application of Automatic Digital Computers to Aeronautics, S. H. Hollingdale, p. 51 (Jan.).

CONWAY, H. G.
Drone Aircraft, p. 163 (March).

COOLING
See Heat Transfer.

COOMBES, L. P.
The Human Engineering Approach (Problems of Take-Off and Landing), p. 688 (Dec.).

COX, H. L. and D. DAWSON
The Effect of Initial Lateral Tension or Slackness on the Deflection of Long, Thin Plates under Normal Pressure (T.N.), p. 672 (Nov.).

COX, R. N.
General Characteristics of Hypersonic Flow Fields (Hypersonic Flow), p. 503 (Sept.).

CRABTREE, L. F.
Hypersonic Boundary Layers with Special Reference to Heat Transfer (Hypersonic Flow), p. 513 (Sept.).

CRAWSHAW, A. H.
Comment on Safe Mechanisms (Raoul Hafner, May), and Reply, p. 416 (July).

CROWE, SQN. LDR. N.
Emergency Passenger Oxygen Systems (T.N.), p. 417 (July).

CUMMING, R. W.
The Australian View (Problems of Take-Off and Landing), p. 701 (Dec.).

DAMPING
See Vibration.

DAUM, GENERAL NOEL
The Griffon Aircraft and the Future of the Turbo-Ram-Jet Combination in the Propulsion of Supersonic Aeroplanes—The Twelfth Louis Blériot Lecture, p. 327 (June).

DAWSON, D. and H. L. COX
The Effect of Initial Lateral Tension or Slackness on the Deflection of Long, Thin Plates under Normal Pressure (T.N.), p. 672 (Nov.).

DE HAVILLAND
See History and Rocket Engines.

DEFINITIONS
Definitions and Terms Relating to Aircraft Control Systems and Components, H. R. Hopkin and H. H. B. M. Thomas, p. 572 (Oct.).

DOMMETT, R. L.
The Critical Height of Distributed Roughness to Cause Boundary Layer Transition (T.N.), p. 722 (Dec.).

DOUGLAS, DONALD W., Jnr.
The American Aircraft Industry, p. 450 (Aug.).

DRONE AIRCRAFT
See Automatic Control.

DUCTS
An Estimate of the Forces on Annular Fairings (T.N.), J. A. Bagley, p. 315 (May).

DUNHAM, J.
Damage to Axial Compressors, p. 576 (Oct.). Comment by A. Coles, and Reply, p. 731 (Dec.).

EDUCATION
See Industry, N.A.T.O.

FAILURE
See Safety.

FAIREY MEMORIAL LECTURE—THE FIRST
Sir Richard Fairey, G. W. Hall, p. 341 (June).

FAIRINGS
See Ducts.

FARRAR, D. J.
The Bloodhound, p. 35 (Jan.).

FATIGUE
See Fretting, Safety.

FOAMS
See Fuels.

FRASER, D. O.
Air Traffic Control and its Influence on the Navigation Problem, p. 175 (March).

FREIGHTERS
See Air Transport.

FRETTING
Fretting in the Light of Aircraft Experience, P. B. Walker, p. 293 (May).

FROST, M. D.
The Inertial Effects of Springs in Oscillation Experiments to Determine Damping (T.N.), p. 602 (Oct.).

FUELS
Inflammability and Electrical Studies of Foams which may Occur at Altitude by De-Aeration of Aviation Turbine Fuels, B. V. Poulston and A. Thomas, p. 581 (Oct.).

FURSE, REAR-ADMIRAL J. P. W.
The Operation of Naval Aircraft and Aircraft Carriers, p. 299 (May).

GAUKROGER, D. R.
A Theoretical Treatment of the Flutter of a Wing with a Localised Mass, p. 95 (Feb.).

GRADUATES' AND STUDENTS' SECTION
See Royal Aeronautical Society.

GRAHAME-WHITE, CLAUDE—AN APPRECIATION
p. 681 (Dec.).

GREEN, L.
The Mechanism and Application of Effusion Cooling, (T.N.), p. 371 (June).

GROOTENHUIS, P.
The Mechanism and Application of Effusion Cooling, p. 73 (Feb.).

GUIDED MISSILES
See also Automatic Control, Navigation, Radar.
Bloodhound, The, D. J. Farrar, p. 35 (Jan.).
Theoretical Principles of Guided Missile Systems, E. G. C. Burt, p. 455 (Aug.).

HAFNER, RAOUL
Safe Mechanisms, p. 273 (May); Comment by A. H. Crawshaw and Reply, p. 416 (July).

HALFORD LECTURE—THE FIRST
Frank Bernard Halford, John L. P. Brodie, p. 194 (April).

HALL, SIR ARNOLD
Presidential Address, p. 129 (March).

HALL, G. W.
Sir Richard Fairey—The First Fairey Memorial Lecture, p. 341 (June).

HARPER, HARRY
Claude Grahame-White—An Appreciation, p. 682 (Dec.).

HAWKES, G. A.
Residual Stresses Resulting from the Forming of High Strength Aluminium Alloys, p. 90 (Feb.).

HEAT TRANSFER
See also Hypersonic Flow, Kinetic Heating.
The Mechanism and Application of Effusion Cooling, P. Grootenhuis, p. 73 (Feb.); Comment by L. Green, p. 371 (June).

HEATH, W. G.
Some Factors Affecting the Choice of Materials (Structural Effects of Kinetic Heating), p. 615 (Nov.).

HISTORICAL GROUP—REGISTER OF HISTORIC AIRCRAFT
p. 479 (Aug.).

HISTORY
See also Grahame-White and Industry.
Frank Bernard Halford—The First Halford Lecture, John L. P. Brodie, p. 194 (April).
Sir Richard Fairey—The First Fairey Memorial Lecture, G. W. Hall, p. 341 (June).

HOLDER, D. W.
Experimental Facilities and Measuring Techniques (Hypersonic Flow), p. 493 (Sept.).

HOLLINGDALE, S. H.
The Application of Automatic Digital Computers to Aeronautics, p. 51 (Jan.).

HOPKIN, H. R. and H. H. B. M. THOMAS
Definitions and Terms Relating to Aircraft Control Systems and Components, p. 572 (Oct.).

HYPERSONIC FLOW
Aerodynamic Problems of Manned Space Vehicles, T. R. F. Nonweiler, p. 521 (Sept.).
Dynamics of a Dissociating Gas, M. J. Lighthill, p. 516 (Sept.).
Experimental Facilities and Measuring Techniques (Hypersonic Flow), D. W. Holder, p. 493 (Sept.).
General Characteristics of Hypersonic Flow Fields, R. N. Cox, p. 503 (Sept.).
Hypersonic Boundary Layers with Special Reference to Heat Transfer, L. F. Crabtree, p. 513 (Sept.).
Magnetogasdynamics and its Possible Aeronautical Applications, J. A. Shercliff, p. 518 (Sept.).
Problems of Hypersonic Aerodynamics—A Survey, R. J. Monaghan, p. 489 (Sept.).
Some Special Aspects of Hypersonic Flow Fields, K. W. Mangler, p. 508 (Sept.).

ICING
Icing Flight Development, B. T. Cheverton, p. 659 (Nov.).

INDUSTRY
American Aircraft Industry, The, Donald W. Douglas Jnr., p. 450 (Aug.).
Managing Aviation Technologies—The Forty-Seventh Wilbur Wright Memorial Lecture, Charles J. McCarthy, p. 382 (July).
Present and the Future, The, F. R. Banks, p. 16 (Jan.).
Some Experiences of a Pioneer in the Aircraft Industry in Australia, Sir Lawrence Wackett, p. 306 (May).

INERTIAL NAVIGATION
See Navigation.

JONES, R. F.
Water and Ice in the Atmosphere, p. 465 (Aug.).

KEEN, E. D.
Freighters—A General Survey, p. 135 (March).

KENYON, G.
The N.A.T.O. Defense College (T.N.), p. 369 (June).

KINETIC HEATING
Advantages and Limitations of Models (Structural Effects of Kinetic Heating), A. J. Sobey, p. 646 (Nov.).
Design of Transparencies (Structural Effects of Kinetic Heating), J. S. Przemieniecki, p. 620 (Nov.).
Some Factors Affecting the Choice of Materials (Structural Effects of Kinetic Heating), W. G. Heath, p. 615 (Nov.).
Some Practical Aspects of Kinetic Heating Calculations (Structural Effects of Kinetic Heating), C. L. Bore, p. 637 (Nov.).

LANCHESTER MEMORIAL LECTURE—THE SECOND
Aeroelasticity—Retrospect and Prospect, A. R. Collar, p. 1 (Jan.).

LANDING
See Take-Off and Landing.

LECTURES
See also Blériot, Fairey, Halford, Lanchester, Wilbur Wright.

Main Lectures
Aeroelasticity—Retrospect and Prospect—The Second Lanchester Memorial Lecture, A. R. Collar, p. 1 (Jan.).
Air Traffic Control Over the North Atlantic, E. W. Pike, p. 206 (April).
Earth Satellites, W. H. Stephens, p. 394 (July).
Frank Bernard Halford—The First Halford Lecture, John L. P. Brodie (Hatfield), p. 194 (April).
Freighters—A General Survey, E. D. Keen (Birmingham), p. 135 (March).
Managing Aviation Technologies—The Forty-Seventh Wilbur Wright Memorial Lecture, Charles J. McCarthy, p. 382 (July).
Safe Mechanisms, Raoul Hafner, p. 273 (May).
Sir Richard Fairey—The First Fairey Memorial Lecture, G. W. Hall (London Airport), p. 341 (June).
The Art of Developing Aero-Engines, A. C. Lovesey (Preston), p. 429 (Aug.).
The Griffon Aircraft and the Future of the Turbo-Ram-Jet Combination in the Propulsion of Supersonic Aeroplanes—The Twelfth Louis Blériot Lecture, General Noël Daum, p. 327 (June).

Lectures
Aircraft in Agriculture: An Assessment of Their Impact on New Zealand Farming, R. H. Scott, p. 531 (Sept.).
Some Aspects of Engine Noise, P. Lloyd, p. 541 (Sept.).
Stress Corrosion—The Engineer's View, P. H. Wall, p. 354 (June).
The Application of Automatic Digital Computers to Aeronautics, S. H. Hollingdale, p. 51 (Jan.).
The de Havilland Spectre I, W. N. Neat, p. 104 (Feb.).
Water and Ice in the Atmosphere, R. F. Jones, p. 465 (Aug.).

All-Day Discussions
Hypersonic Flow: Problems of Hypersonic Aerodynamics—A Survey, R. J. Monaghan; Experimental Facilities and Measuring Techniques, D. W. Holder; General Characteristics of Hypersonic Flow Fields, R. N. Cox; Some Special Aspects of Hypersonic Flow Fields, K. W. Mangler; Hypersonic Boundary Layers with Special Reference to Heat Transfer, L. F. Crabtree; Dynamics of a Dissociating Gas, M. J. Lighthill; Magnetogasdynamics and its Possible Aeronautical Applications, J. A. Shercliff; Aerodynamic Problems of Manned Space Vehicles, T. R. F. Nonweiler; Summary of the Discussion, Beryl E. Beadle; p. 489 (Sept.).
Operational Problems of Take-Off and Landing: Automatic Air Traffic Control, E. W. Pike; The Pilot's Problems, B. O. Prowse; The Human Engineering Approach, L. P. Coombes; Safety and Regularity in Landing, E. S. Calvert; Discussion; The Australian View, R. W. Cumming; Operational Problems in South Africa: The Regulatory Authority's Approach, A. J. A. Roux, p. 685 (Dec.).
Structural Effects of Kinetic Heating: Some Factors Affecting the Choice of Materials, W. G. Heath; Design of Transparencies, J. S. Przemieniecki; Some Practical Aspects of Kinetic Heating Calculations, C. L. Bore; Advantages and Limitations of Models, A. J. Sobey; Summary of the Discussion, Maureen E. Michael and Joan Bruce, p. 615 (Nov.).

Branch Lectures

Air Traffic Control and its Influence on the Navigation Problem, D. O. Fraser (Boscombe Down), p. 175 (March).
Damage to Axial Compressors, J. Dunham (Derby), p. 576 (Oct.).
Icing Flight Development, B. T. Cheverton (Luton), p. 659 (Nov.).
Notes on Air Breathing Engines for Supersonic Flight, A. W. Morley (Luton), p. 23 (Jan.).
Some Experiences of a Pioneer in the Aircraft Industry in Australia, Sir Lawrence Wackett (Melbourne, Australian Division), p. 306 (May).
The Economy of Structures—The Fifth Barnwell Memorial Lecture, Sir Alfred Pugsley (Bristol), p. 153 (March).
The Operation of Naval Aircraft and Aircraft Carriers, Rear-Admiral J. P. W. Furse (Glasgow), p. 299 (May).
The Present and the Future—The Third Sir Henry Royce Memorial Lecture, F. R. Banks (Derby), p. 16 (Jan.).
Thrust Reversal for Jet Aircraft, R. H. Colley (Derby), p. 563 (Oct.).

Astronautics and Guided Flight Section Lectures

Basic Principles of Radar with Particular Reference to Aircraft and Missile Applications, F. D. Boardman, p. 589 (Oct.).
The Bloodhound, D. J. Farrar, p. 35 (Jan.).
Drone Aircraft, H. G. Conway, p. 163 (March).
Inertial Navigation, J. E. Pateman, p. 113 (Feb.).
Theoretical Principles of Guided Missile Systems, E. G. C. Burt, p. 455 (Aug.).

Graduates' and Students' Section Lecture

The American Aircraft Industry, Donald W. Douglas Jnr., p. 450 (Aug.).

LECTURE DISCUSSIONS—CONTRIBUTORS TO

Bathurst, Captain the Hon. G. B., p. 414 (July); Baxter, A. D., p. 413 (July); Bedford, L. H., p. 411 (July); Bennett, Prof. J. A. J., p. 288 (May); Bergin, Dr. K. G., p. 219 (April); Brabazon, Lord, p. 339 (June); Bulman, Major G. P., p. 205 (April); Burns, W. G. F., p. 700 (Dec.); Calvert, E. S., pp. 697-701 (Dec.); Camp, Flt. Lt. A. J., pp. 697, 700 (Dec.); Campbell, T. C., p. 447 (Aug.); Campbell-Orde, A. C., pp. 217 (April), 699 (Dec.); Cane, Capt. A. P. W., pp. 695-700 (Dec.); Cleaver, A. V., p. 410 (July); Coombes, L. P., pp. 698-700 (Dec.); Cope, A. J., pp. 289, 290 (May); Crawford, Lt. Colonel R. L., p. 216 (April); Cronbach, P. L., p. 147 (March); Cullum, R. D., p. 151 (March); Cuss, J. F., p. 148 (March); Davies, F. R. p. 150 (March); Davies, Handel, p. 15 (Jan.); Deakin, J., p. 699 (Dec.); Dobson, D. L., p. 148 (March); Dowlen, E. M., p. 413 (July); Edwards, J. L., p. 292 (May); Emerson, Lt. Colonel, p. 217 (April); Farren, Sir William, p. 392 (July); Fitzwilliams, O. L. L., p. 291 (May); Foss, J. F., p. 448 (Aug.); Gardner, H. H., p. 412 (July); Green, N. C., p. 696 (Dec.); Hafner, Raoul, pp. 288-292 (May); Hall, Sir Arnold, pp. 15 (Jan.), 152 (March), 220 (April), 353 (June), 414 (July); Handley Page, Sir Frederick, p. 353 (June); Haworth, L., p. 148 (March); Hunt, Capt. V. A. M., pp. 214, 219, 220 (April); Hutchinson, J. E., p. 699 (Dec.); Keen, E. D., pp. 151-152 (March); Lachmann, Dr. G. V., p. 699 (Dec.); Laight, B. P., pp. 146 (March), 447 (Aug.); Lawrence, J. O. N., p. 149 (March); Lovesey, A. C., pp. 445-449 (Aug.); Masefield, Peter G., pp. 219 (April), 392 (July), 695-701 (Dec.); McDonald, J. Y., p. 445 (Aug.); Mills, R. E., p. 292 (May); Morgan, M. B., p. 414 (July); Newbery, T. G. G., p. 290 (May); Nicholson, L. F., p. 699 (Dec.); Owner, F. M., p. 292 (May); Page, F. W., p. 448 (Aug.); Pennington, W. A., p. 446 (Aug.); Pike, E. W., pp. 216-220 (April), 695-7 (Dec.); Prescott, T. W., pp. 695-700 (Dec.); Prowse, Capt. B. O., pp. 695-700 (Dec.); Retief, Colonel P. M., p. 696 (Dec.); Rowe, N. E., p. 150 (March); Smith, H. E., p. 220 (April); Stallibrass, G. W., pp. 696-8 (Dec.); Stephens, W. H., pp. 411-414 (July); Taylor, J., p. 288 (May); Templeton, H., p. 151 (March); Thomas, D. L., p. 220 (April); Tye, W., p. 288 (May); Tymms, Sir Frederick, p. 218 (April); Watson, H. R., p. 150 (March); Wilkinson, K. G., p. 700 (Dec.); Woodman, Capt. J., pp. 217 (April), 695, 700 (Dec.); Woods, Dr. M. W., p. 696 (Dec.); Young, R. E., pp. 697, 700 (Dec.).

LECTURE DISCUSSIONS—SUMMARIES

The Bloodhound, D. J. Farrar, p. 50 (Jan.)
Inertial Navigation, J. E. Pateman, p. 117 (Feb.).
Drone Aircraft, H. G. Conway, p. 174 (March).
Theoretical Principles of Guided Missile Systems, E. G. C. Burt, p. 464 (Aug.).
All-Day Discussion on Hypersonic Flow, p. 528 (Sept.).
Aircraft in Agriculture, R. H. Scott, p. 540 (Sept.).
Basic Principles of Radar With Particular Reference to Aircraft and Missile Applications, F. D. Boardman, p. 596 (Oct.).
All-Day Discussion on the Structural Effects of Kinetic Heating, p. 656 (Nov.).

LECTURE THEATRE

See Royal Aeronautical Society.

LIBRARY

See Reviews; *for* Additions to the Library and Reports *see* Royal Aeronautical Society.

LIGHTHILL, M. J.

Dynamics of a Dissociating Gas (Hypersonic Flow), p. 516 (Sept.).

LINDLEY, B. C.

Pressure Loss Data for Crimped Metal Strip Matrices (T.N.), p. 597 (Oct.).

LLOYD, P.

Some Aspects of Engine Noise, p. 541 (Sept.).

LOVESEY, A. C.

The Art of Developing Aero-Engines, p. 429 (Aug.).

MALEY, C. E.

A Simplified Numerical Analysis (T.N.), p. 59 (Jan.).

MANAGEMENT

See Industry

MANGLER, K. W.

Some Special Aspects of Hypersonic Flow Fields (Hypersonic Flow), p. 508 (Sept.).

MASKELL, E. C. and J. WEBER

On the Aerodynamic Design of Slender Wings, p. 709 (Dec.).

MATERIALS

See also Kinetic Heating, Stress Corrosion.
Residual Stresses Resulting from the Forming of High Strength Aluminium Alloys, G. A. Hawkes, p. 90 (Feb.).

MATHEMATICS

Approximate Solution of Linear Second Order Differential Equations (T.N.), William Squire, p. 368 (June).
Iterative Solutions of the Equations for Plane Oblique Shock Waves (T.N.), A. R. Collar, p. 669 (Nov.).
On the Evaluation of Certain Finite Sums of Progressive Products (T.N.), A. R. Collar, p. 118 (Feb.).
Simplified Numerical Analysis, A (T.N.), C. E. Maley, p. 59 (Jan.).

MATRICES (METAL)

Pressure Loss Data for Crimped Metal Strip Matrices (T.N.), B. C. Lindley, p. 597 (Oct.).

McCARTHY, CHARLES J.

Managing Aviation Technologies—The Forty-Seventh Wilbur Wright Memorial Lecture, p. 382 (July).

McKENZIE, A. B. and H. PEARSON

Wakes in Axial Compressors (T.N.), p. 415 (July).

MEDAL, N. E. ROWE, 1959

Damage to Axial Compressors, J. Dunham, p. 576 (Oct.).

MEDALS, AWARDS, AND PRIZES

See Royal Aeronautical Society.

METALLURGY

See Materials and Stress Corrosion.

METEOROLOGY
See also Icing.
Water and Ice in the Atmosphere, R. F. Jones, p. 465 (Aug.).

MICHAEL, MAUREEN E. and JOAN BRUCE
Summary of the Discussion—Structural Effects of Kinetic Heating (All-Day Discussion), p. 656 (Nov.).

MONAGHAN, R. J.
Problems of Hypersonic Aerodynamics—A Survey (Hypersonic Flow), p. 489 (Sept.).

MOORE, T. W. F.
A Note on the Causes of Thin Aerofoil Stall (T.N.), p. 724 (Dec.).

MORGAN, P. G.
High Speed Flow Through Wire Gauzes (T.N.), p. 474 (Aug.).
The Coefficient of Contraction in the Flow Through Perforated Plates (T.N.), p. 723 (Dec.).

MORLEY, A. W.
Notes on Air Breathing Engines for Supersonic Flight, p. 23 (Jan.).

MOTTRAM, A. W. T. and E. G. D. ANDREWS
A Note on Liquid and Solid Propellants for Rockets (T.N.), p. 265 (April).

N.A.T.O.
The N.A.T.O. Defense College (T.N.), G. Kenyon, p. 369 (June).

NAVAL AIRCRAFT
The Operation of Naval Aircraft and Aircraft Carriers, Rear-Admiral J. P. W. Furse, p. 299 (May).

NAVIGATION
See also Air Traffic Control.
Inertial Navigation, J. E. Pateman, p. 113 (Feb.).

NEAT, W. N.
The de Havilland Spectre I, p. 104 (Feb.).

NEW ZEALAND
See Agricultural Aviation.

NOISE
See Acoustics.

NONWEILER, T. R. F.
Aerodynamic Problems of Manned Space Vehicles (Hypersonic Flow), p. 521 (Sept.).

NORD-AVIATION GRIFFON
See Propulsion.

OBITUARIES
See also Annual Report, p. 262 (April).
Claude Grahame-White, p. 681 (Dec.).

OPERATIONS
See Icing, Take-Off and Landing.

OXYGEN SYSTEMS
Emergency Passenger Oxygen Systems (T.N.), Sqn. Ldr. N. Crowe, p. 417 (July).

PATEMAN, J. E.
Inertial Navigation, p. 113 (Feb.).

PEARCE, K. W.
The Future for Solid Propellant Rockets, p. 221 (April).

PEARSON, H. and A. B. McKENZIE
Wakes in Axial Compressors (T.N.), p. 415 (July).

PERFORATED PLATES
See Aerodynamics

PHOTOELASTICITY
The Prediction of Three-Dimensional Stress Concentration Factors (T.N.), I. M. Allison, p. 549 (Sept.).

PIKE, E. W.
Air Traffic Control Over The North Atlantic, p. 206 (April).
Automatic Air Traffic Control (Problems of Take-Off and Landing), p. 685 (Dec.).

PILOTING
See Take-Off and Landing.

POULSTON, B. V. and A. THOMAS
Inflammability and Electrical Studies of Foams which may Occur at Altitude by De-Aeration of Aviation Turbine Fuels, p. 581 (Oct.).

PRESIDENTIAL ADDRESS
Sir Arnold Hall, p. 129 (March).

PRESSURE LOSS
See Matrices (Metal).

PROPELLANTS
See Rockets.

PROPULSION
See also Compressors, Heat Transfer, History, Rocket Engines, Rockets.
Art of Developing Aero-Engines, The, A. C. Lovesey, p. 429 (Aug.).
Griffon Aircraft and the Future of the Turbo-Ram-Jet Combination in the Propulsion of Supersonic Aeroplanes—The Twelfth Louis Blériot Lecture, General Noël Daum, p. 327 (June).
Notes on Air Breathing Engines for Supersonic Flight, A. W. Morley, p. 23 (Jan.).
On the Importance of Engine Pressure Level to Turbo-Jet Engine Reheat Performance (T.N.), W. A. Woods, p. 263 (April).
Some Aspects of Engine Noise, P. Lloyd, p. 541 (Sept.).
Thrust Reversal for Jet Aircraft, R. H. Colley, p. 563 (Oct.).

PROWSE, B. O.
The Pilot's Problems (Problems of Take-Off and Landing), p. 687 (Dec.).

PRZEMIENIECKI, J. S.
Design of Transparencies (Structural Effects of Kinetic Heating), p. 620 (Nov.).

PUGSLEY, SIR ALFRED
The Economy of Structures, p. 153 (March).

RADAR
Basic Principles of Radar with Particular Reference to Aircraft and Missile Applications, F. D. Boardman, p. 589 (Oct.).

RAM-JET
See Propulsion.

REPORTS
See Royal Aeronautical Society.

REVIEWS
Advanced Mechanics of Fluids, Edited by Hunter Rouse, p. 422 (July).
Advances in Applied Mechanics, Vol V, Edited by H. L. Dryden and T. von Kármán, p. 321 (May).
Aerodynamic Components of Aircraft at High Speeds (Volume II of High Speed Aerodynamics and Jet Propulsion), Edited by A. F. Donovan and H. R. Lawrence, p. 122 (Feb.).
Aerodynamik der Flugzeug, H. Schlichting and E. Truckenbrodt, p. 270 (April).
Aeronautical Journal, The, Volumes I-XV, 1897-1911 (facsimile reprint in five volumes), p. 121 (Feb.).
AGARD Materials Properties Handbook, Vol. I—Aluminium Alloys, p. 373 (June).
Air Forces of the World, The, William Green and John Fricker, p. 186 (March).
Aircraft and Missile Propulsion, Vol. I—Thermodynamics of Fluid Flow and Application to Propulsion Engines, M. J. Zucrow, p. 268 (April).
Aircraft Electrical Engineering, Edited by G. G. Wakefield, p. 375 (June).
Airline Price Policy, Paul W. Cherington, p. 423 (July).

American Aces of World War II, Edward H. Sims, p. 186 (March).
Applied Hydrodynamics, H. R. Vallentine, p. 609 (Oct.).
Applied Mechanics, J. A. Cormack, p. 187 (March), Correction, p. 376 (June).
Aviation Medicine—Selected Reviews, Agardograph 25, p. 268 (April).
Axial Flow Compressors, J. H. Horlock, p. 421 (July).
Ballistik, R. E. Kutterer, p. 558 (Sept.).
Basic Electricity, Van Valkenburgh, p. 423 (July).
Behind the Sputniks—A Survey of Soviet Space Science, F. J. Krieger, p. 65 (Jan.).
Bomber's Eye, The, Dudley Saward, p. 422 (July).
Bonded Aircraft Structures, C.I.B.A. (A.R.L.), p. 270 (April).
British Civil Aircraft 1919-59, Vol. I, A. J. Jackson, p. 677 (Nov.).
British Weather in Maps, J. A. Taylor and R. A. Yates, p. 64 (Jan.).
Celestial Mechanics, E. Findlay-Freundlich, p. 483 (Aug.).
C.F.S. Birthplace of Air Power, John W. R. Taylor, p. 185 (March).
Combustion and Propulsion Problems, Edited by J. Fabri, A. H. Lefebvre, O. Lutz and M. W. Thring, p. 557 (Sept.).
Come North With Me, Bernt Balchen, p. 555 (Sept.).
Control System Components, J. E. Gibson and F. E. Tuteur, p. 188 (March).
Dictionary of Guided Missiles and Space Flight, Edited by Grayson Merrill, p. 737 (Dec.).
Die Entwicklung der Flugzeuge, 1914-1918, Heinz Nowarra, p. 269 (April).
Dynamics of Flight—Stability and Control, Bernard Etkin, p. 557 (Sept.).
Einfuhring in die Theorie der Stromungsmaschinen, Albert Betz, p. 739 (Dec.).
Electricity in Aircraft, F. G. Spreadbury, p. 188 (March).
Elements of Classical Thermodynamics, The, A. B. Pippard, p. 121 (Feb.).
Fire Control Principles, Walter Wrigley and John Hovorka, p. 608 (Oct.).
First Five Million Miles, The, Byron Moore, p. 484 (Aug.).
Flying the Omnirange. C. A. Zweng and J. Dohm, p. 187 (March).
Flying Witness, Graham Wallace, p. 122 (Feb.).
Fundamentals of Advanced Missiles, Richard B. Dow, p. 483 (Aug.).
Fundamentals of Gas Dynamics, Edited by H. W. Emmons, p. 269 (April).
Gas Dynamics, A. B. Cambel and B. H. Jennings, p. 374 (June).
Guided Missile Engineering, Edited by Allen E. Puckett and Simon Ramo, p. 676 (Nov.).
Guided Missiles—Operations, Design and Theory, U.S. Department of the Air Force, p. 64 (Jan.).
Handbook of Automation, Computation and Control, Vol. I —Control Fundamentals, Edited by E. M. Grabbe *et al.*, p. 738 (Dec.).
Handbook of Noise Control, Edited by C. M. Harris, p. 187 (March).
He Flew By My Side, Edwin Morzfeld, p. 738 (Dec.).
Heavenly Adventurer: Sefton Brancker and the Dawn of British Aviation, Basil Collier, p. 376 (June).
Helicopter Dynamics and Aerodynamics, P. R. Payne, p. 553 (Sept.).
High Temperature Effects in Aircraft Structures, Edited by N. J. Hoff, p. 267 (April).
Hyperstatic Structures, J. A. L. Matheson, p. 608 (Oct.).
Instrument Flying, P. V. H. Weems and C. A. Zweng, p. 186 (March).
Introduction to Monopulse, Donald R. Rhodes, p. 609 (Oct.).
Introduction to the Design of Servomechanisms, J. L. Bower and P. M. Schultheiss, p. 374 (June).
Introduction to the Theoretical and Experimental Analysis of Stress and Strain, A. J. Durelli, E. A. Phillips and C. H. Tsao, p. 271 (April).
Jets and Rockets, A. Barker, T. R. F. Nonweiler and R. Smelt, p. 322 May).
Knight of the Air, Maxwell A. Smith, p. 555 (Sept.).
Manual on Rockets and Satellites, Edited by L. V. Berkner, p. 268 (April).
Materials for Rockets and Missiles, Robert G. Frank and William F. Zimmerman, p. 610 (Oct.).
Mechanics of Machines, J. Hannah and R. C. Stephens, p. 64 (Jan.).
Men and Machines, A History of D. Napier & Son (Engineers) Ltd., 1808-1958, C. H. Wilson and W. J. Reader, p. 123 (Feb.).
Metal Fatigue, Edited by J. A. Pope, p. 483 (Aug.).
Metals for Supersonic Aircraft and Missiles, Edited by D. W. Grobecker, p. 609 (Oct.).
Missile Engineering Handbook, C. W. Besserer, p. 123 (Feb.).
Modern Transistor Circuits, John M. Carroll, p. 483 (Aug.).
Nimonic Alloys, The, W. Betteridge, p. 373 (June).
Nine Lives, Group Captain A. C. Deere, p. 677 (Nov.).
Nuclear Rocket Propulsion, R. W. Bussard and R. D. de Lauer, p. 321 (May).
Physical Metallurgy of Magnesium and Its Alloys, G. V. Raynor, p. 737 (Dec.).
Polar Atmosphere Symposium, Part I—Meteorology Section, Part II—Ionosphere Section, p. 421 (July).
Proceedings of the 9th International Astronautical Congress, Amsterdam, 1958, p. 736 (Dec.).
Raumfahrt—Technische Uberwindung des Krieges, Eugen Sänger, p. 739 (Dec.).
Rocket Encyclopedia, Edited by J. W. Herrick and E. Burgess, p. 737 (Dec.).
Rocket Propellants, Francis A. Warren, p. 556 (Sept.).
Rocketry and Space Exploration, A. G. Haley, p. 737 (Dec.).
Seven Skies, The, John Pudney, p. 738 (Dec.).
Silver Dart, The, H. Gordon Green, p. 553 (Sept.).
Sounding Rockets, Homer E. Newell, Jr., p. 676 (Nov.).
Space Flight, Dr. Carsbie C. Adams, p. 736 (Dec.).
Sputniks and After, Karl Gilzin, p. 736 (Dec.).
Squadron Histories R.F.C., R.N.A.S. and R.A.F., 1912-59, Peter Lewis, p. 554 (Sept.).
Switching Circuits with Computer Applications, Watts S. Humphrey, p. 185 (March).
Synthesis of Linear Communication Networks, Wilhelm Cauer, p. 375 (June).
Technical Writer, The, J. W. Godfrey and G. Parr, p. 322 (May).
Theory and Design of Magnetic Amplifiers, E. H. Frost Smith, p. 270 (April).
Transform Method in Linear System Analysis, J. A. Aseltine, p. 186 (March).
War and Peace in the Space Age, Lt. Gen. James Gavin, p. 423 (July).
Werkstoff—Handbuch der Deutschen Luftfahrt, Part I—Metallische Werkstoff, p. 66 (Jan.).
Zeitschrift fur Angewandte Mathematik und Physik, Jakob Ackeret, p. 66 (Jan.).

ROCKET ENGINES

The de Havilland Spectre I, W. N. Neat, p. 104 (Feb.).

ROCKETS

Future for Solid Propellant Rockets, The, K. W. Pearce, p. 221 (April).
Note on Liquid and Solid Propellants for Rockets, A, (T.N.), E. G. D. Andrews and A. W. T. Mottram, p. 265 (April).

ROUGHNESS

See Boundary Layer.

ROUX, A. J. A.

Operational Problems in South Africa: The Regulatory Authority's Approach (Problems of Take-Off and Landing), p. 704 (Dec.).

ROYAL AERONAUTICAL SOCIETY

Acknowledgments, pp. I (Jan.); XIX (April); XXXIII (July); XLVII, LI (Oct.); LVIII (Dec.).
Additions to the Library, pp. 66 (Jan.); 123 (Feb.) XVIII, 189 (March); XXII, 271 (April); 322 (May); 377 (June); 425 (July); 484 (Aug.); 558 (Sept.); 611 (Oct.); 678 (Nov.); 740 (Dec.).
Agricultural Aviation Group (formation of), pp. XXXIII (July); Provisional Committee, XLVII (Oct.).
Anglo-American Aeronautical Conference (Seventh), Notices pp. XIII (March), XLIX (Oct.).
Annual General Meeting, Notices, pp. XIII (March), XIX (April); Report, p. 242 (April).
Annual Report of the Council (Ninety-Fourth), 1958-1959, p. 239 (April).
Annual Subscriptions, pp. LIII (Nov.); LIX (Dec.).
Associate Fellowship Examination, Results for Dec. 1958, p. XXVII (May); Results for June 1959, p. XLVII (Oct.).
Astronautics and Guided Flight Section, p. 243 (April).

Australian Division—Annual Report for the Year Ended 31st December 1958, p. 733 (Dec.).
Balance Sheets, 1958, p. 248 (April).
Branches and Divisions, Feb., p. 245 (April), July, Sept., Nov.
Brough Branch Tops 600 Membership Mark, p. XII (Feb.).
Changes of Address or Appointment, pp. IV (Jan.); XVII (March).
Committees of Council, p. 240 (April).
Council 1958-1959, Jan., March; 1959-1960, June, Aug., Oct., Dec.
Elections, pp. IV (Jan.); XI (Feb.); XVII (March); XXI (April); XXVIII (May); XXXII (June); XXXV (July); XL (Aug.); XLI (Sept.); XLIX (Oct.); LVI (Nov.); LXIII (Dec.).
Elliott Memorial Prize, pp. XIV (March), 246 (April).
Garden Party Programmes, p. XV (March).
General Meeting of the Society (Report)—Increased Subscriptions, p. V (Jan.); General Meeting—By-Laws, p. XIX (April); Report, p. XXXIII (July).
Graduates' and Students' Section, pp. 63 (Jan.); 120 (Feb.); 184 (March); 243, 266 (April); 320 (May); 372 (June); 420 (July); 478 (Aug.); 552 (Sept.); 607 (Oct.); 675 (Nov.); 732 (Dec.).
Guided Flight Section—*now* Astronautics and Guided Flight Section.
Henlow Cadet Prize, pp. 245 (April), LIII (Nov.).
Historical Group (formation of), pp. XXXVII (Aug.); 479 (Aug.).
Honorary Companion, Mr. Gustavus Green, p. IX (Feb.). *see also* p. XIV (March).
Honorary Companions, p. XXIX (June).
Honorary Fellows, p. XXIX (June).
Honours awarded to members, pp. IX (Feb.); XIV (March); 246 (April); XXVI (May); XXXIII (July); XLI (Sept.); LIII (Nov.); LIX (Dec.).
Income Tax Relief, pp. XII (Feb.); (for members of the I.A.S.) XIX (April); (for members of the C.A.I.) XLV (Oct.); LVI (Nov.).
International Congress of the Aeronautical Sciences (The Second, Sept. 1960), Notice, p. LVIII (Dec.).
Journal Binding, pp. IV (Jan.); XVII (March); XXVIII (May); LI (Oct.); New Prices, LV (Nov.); LXIII (Dec.).
Lecture Theatre Appeal, pp. XXXI (June); XXXIV (July); XXXVIII (Aug.); XLIII (Sept.); L (Oct.); LX (Dec.)
Lecture Theatre—Progress Photographs, p. LIX (Dec.).
Lectures—New Policy, p. XLV (Oct.).
Letter Translation, p. XVII (March).
Man Powered Aircraft Group (formation of), p. XXVI (May).
Medals and Awards of the Society, p. 245 (April).
Medals and Prizes of the Society for 1959, p. XXIX (June), Presentation at the Wilbur Wright Memorial Lecture, p. 381 (July).
Nash Collection—New Home, p. XLV (Oct.); Move to London Airport, p. LVIII (Dec.).
New Fellows, p. XXIX (June).
New Year's Honours List, p. IX (Feb.).
News of Members, pp. I (Jan.); XI (Feb.); XVI (March); XX (April); XXVII (May); XXXII (June); XXXV (July); XXXIX (Aug.); XLII (Sept.); XLVIII (Oct.); LVI (Nov.); LXIV (Dec.).
Nomination of Candidates for Council, pp. IX (Feb.), XIII (March).
Nominations for Fellowship of the Society, p. I (Jan.).
President 1959-1960, P. G. Masefield, M.A.(Eng.), M.Inst.T., Hon.F.I.A.S., *Fellow*, p. XXIV (May).
President-Elect, 1960-1961, p. XXIX (June).
Presidential Reception and Address, p. 129 (March).
R.Ae.S. Prizes in Aeronautics, pp. 246 (April), LIII (Nov.).
R.Ae.S. Scholarships and Grants, 1959-1960, p. XLII (Sept.).
Register of Historic Aircraft, p. 480 (Aug.).
Reports, pp. 68 (Jan.); 125 (Feb.); 189 (March); 272 (April); 323 (May); 378 (June); 426 (July); 486 (Aug.); 559 (Sept.); 611 (Oct.); 678 (Nov.); 741 (Dec.).
Representatives of the Society on Other Bodies, pp. 241 (April); XLII (Sept.).
Secretary's News Letter, LVII (Dec.).
Special General Meeting—The Society and the Helicopter Association, Notice, p. XXXVII (Aug.).
Subscriptions—Increase of, p. V (Jan.).
Summaries of Lectures, pp. LII (Oct.); LIV (Nov.); LXV (Dec.).
Supplement to Oxford English Dictionary, pp. XXX (June); XXXVII (Aug.); XLVII (Oct.); LVIII (Dec.).
Vice-Presidents, 1959-1960, p. XXIX (June).

SAFETY

See also Take-Off and Landing.
Safe Mechanisms, Raoul Hafner, p. 273 (May).
Comment by A. H. Crawshaw and Reply, p. 416 (July).

SATELLITES

See Astronautics.

SCOTT, R. H.

Aircraft in Agriculture: An Assessment of Their Impact on New Zealand Farming, p. 531 (Sept.).

SHERCLIFF, J. A.

Magnetogasdynamics and its Possible Aeronautical Applications (Hypersonic Flow), p. 518 (Sept.).

SOBEY, A. J.

Advantages and Limitations of Models (Structural Effects of Kinetic Heating), p. 646 (Nov.).

SOUTHWELL, P. H.

The Third Agricultural Aviation Research Conference (T.N.), p. 183 (March).

SPRINGS

See Vibration.

SQUIRE, WILLIAM

Comment on Annular Flow—A Note on the Turbulent Velocity Profile (T.N.), Henry Barrow (Nov. 1958), p. 119 (Feb.).
Approximate Solution of Linear Second Order Differential Equations (T.N.), p. 368 (June).

STABILITY AND CONTROL

See Aeroelasticity, Automatic Control, Definitions.

STEPHENS, W. H.

Earth Satellites, p. 394 (July).

STRESS CONCENTRATION

The Prediction of Three-Dimensional Stress Concentration Factors (T.N.), I. M. Allison, p. 549 (Sept.).

STRESS CORROSION

Stress Corrosion—The Engineer's View, P. H. Wall, p. 354 (June).

STRESS DISTRIBUTION

See Materials

STRUCTURES

See also Kinetic Heating, Safety.
Economy of Structures, The, Sir Alfred Pugsley, p. 153 (March).
Effect of Initial Lateral Tension or Slackness on the Deflection of Long, Thin Plates under Normal Pressure, The (T.N.), H. L. Cox and D. Dawson, p. 672 (Nov.).
Elastic Instability of Stiffened Sheet under Compression Reacted by Shear (T.N.), J. B. Caldwell, p. 366 (June).
Exact Results for the Bending Shear Stress Distribution for Some Simple Sections (T.N.), J. Lockwood Taylor, p. 181 (March).

STRUTS

See Testing.

TAKE-OFF AND LANDING

Australian View, The (Problems of Take-Off and Landing), R. W. Cumming, p. 701 (Dec.).
Automatic Air Traffic Control (Problems of Take-Off and Landing), E. W. Pike, p. 685 (Dec.).
Human Engineering Approach, The (Problems of Take-Off and Landing), L. P. Coombes, p. 688 (Dec.).
Operational Problems in South Africa: The Regulatory Authority's Approach (Problems of Take-Off and Landing), A. J. A. Roux, p. 704 (Dec.).
Pilot's Problems, The (Problems of Take-Off and Landing), B. O. Prowse, p. 687 (Dec.).
Safety and Regularity in Landing (Problems of Take-Off and Landing), E. S. Calvert, p. 690 (Dec.).

TAYLOR, A. S.
The Present Status of Aircraft Stability Problems in the Aeroelastic Domain, p. 227 (April).

TAYLOR, J. LOCKWOOD
Exact Results for the Bending Shear Stress Distribution for Some Simple Sections (T.N.), p. 181 (March).

TESTING
See also Icing.
Measurement of Travelling Shock Waves and Transient Velocities with a Farnboro Indicator (T.N.), R. S. Benson and W. A. Woods, p. 317 (May).
Tensile Strut-Testing Machines (T.N.), A. H. Chilver, p. 57 (Jan.).

THERMODYNAMICS
See Kinetic Heating.

THOMAS, A. and B. V. POULSTON
Inflammability and Electrical Studies of Foams which may Occur at Altitude by De-Aeration of Aviation Turbine Fuels, p. 581 (Oct.).

THOMAS, H. H. B. M. and H. R. HOPKIN
Definitions and Terms Relating to Aircraft Control Systems and Components, p. 572 (Oct.).

THRUST REVERSAL
See Propulsion.

TRANSPARENCIES
Design of Transparencies (Structural Effects of Kinetic Heating), J. S. Przemieniecki, p. 620 (Nov.).

VIBRATION
The Inertial Effects of Springs in Oscillation Experiments to Determine Damping (T.N.), M. D. Frost, p. 602 (Oct.).

WACKETT, SIR LAWRENCE
Some Experiences of a Pioneer in the Aircraft Industry in Australia, p. 306 (May).

WALKER, P. B.
Fretting in the Light of Aircraft Experience, p. 293 (May).

WALL, P. H.
Stress Corrosion—The Engineer's View, p. 354 (June).

WEBER, J.
An Estimate of the Suction Peak on Infinite Sheared Wings (T.N.), p. 476 (Aug.).

WEBER, J. and E. C. MASKELL
On the Aerodynamic Design of Slender Wings, p. 709 (Dec.).

WILBUR WRIGHT MEMORIAL LECTURE—THE FORTY-SEVENTH..
Managing Aviation Technologies, Charles J. McCarthy, p. 382 (July).

WILES, W. F.
Comment on Wakes in Axial Compressors, H. Pearson and A. B. McKenzie (July), p. 730 (Dec.).

WIRE GAUZES
See Aerodynamics.

WOODS, W. A.
On the Importance of Engine Pressure Level to Turbo-Jet Engine Reheat Performance (T.N.), p. 263 (April).

WOODS, W. A. and R. S. BENSON
Measurement of Travelling Shock Waves and Transient Velocities with a Farnboro Indicator (T.N.), p. 317 (May).